

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) ~~An optimized~~ A system for [[the]] regulation and discontinuous measurement of [[the]] an oxygen content or [[the]] a content of any other gas in platforms for composting or processing waste, ~~especially~~ in the form of swaths, the system comprising:

at least one remote bay having at least one gas measurement probe and, ~~in particular,~~ the measurement probe being at least one oxygen or CO₂ measurement probe;

a gas intake pump;

electric valves operated by a program controller; and

a pipe connecting each of the electric valves to a gas sampling device, the electric valves coupled to the pump allowing the air and the gases contained in this air at each sampling device to be drawn in successively and sent to the measurement probe;

wherein the sampling device is a smooth sampling rod with two opposite ends able to be driven into the pile(s) of waste or compost; each one of the smooth sampling rods corresponding to one single pipe and ~~carrying~~ being fitted with an air intake strainer at one end, the pipe being connected at the other end of

the rod, ~~and by the fact that~~ the oxygen measurement probe ~~must~~
~~be~~ is able to supply within a very short response time the
measurement of the oxygen content of several swaths and that
consequently this probe is a heated zirconium oxide sensor ~~type~~
with a response time less than ten seconds.

2. (currently amended) The system as in claim 1,
~~characterized by the fact that~~ wherein the electric valves are
separate from the program controller or are integrated directly
into the program controller.

3. (currently amended) The system as in one of the claims in
1 or 2, ~~characterized by the fact that~~ wherein the attachment of
the rod to the pipe uses a packing gland facilitating the
fastening or insertion of the pipe.

4. (currently amended) The system as in claim 3,
~~characterized by the fact that~~ wherein a single gas measurement
probe, in particular oxygen or CO₂ can be used to measure,
respectively, the oxygen or CO₂ content of several swaths by
means of samples obtained from the various gas sampling rods.

5 (currently amended) The system as in claim 4,
~~characterized by the fact that~~ wherein the program controller
further comprising at least one temperature probe attachable to

at least one input/output port enabling it to receive PT 100 or PT 1000- type signals for temperature measurement.

6. (currently amended) The system as in claim 5, ~~characterized by the fact that~~ wherein the rod for sampling air in the waste, and used for measuring the concentration of oxygen, CO₂ or any other gas, does not contain a sensor or a transmitter built into the body of the rod, but only the intake strainer and its respective pipe.

7. (currently amended) The system as in claim 6, ~~characterized by the fact that~~ wherein the gas intake pump being equipped with a device for regulating the flow of air to the probe(s), of ~~[[the]]~~ a rotameter ~~type~~.

8. (currently amended) The system as in claim 1, ~~characterized by the fact that~~ wherein the air-sampling rod contains, at one of its ends, the intake strainer and, at the other end, a packing gland enabling insertion of the pipe for sampling the air in the compost or waste.

9. (currently amended) A gas measurement system for sampling and measuring gas content in piles or platforms of composting or processing waste, ~~especially~~ in the form of swaths, the gas measurement system comprising:

at least one remote bay having at least one gas measurement probe, the gas measurement probe being a heated zirconium oxide sensor ~~type~~, the gas measurement probe being in communication with a program controller;

a gas intake pump;

at least one electric valve operated by the program controller; and

at least one pipe connected the electric valve to a smooth rod, the electric valve being coupled to the pump allowing the air and the gases contained in the air at the smooth rod to be drawn in successively and sent to the gas measurement probe;

wherein the smooth rod having a first end able to be driven into the pile of waste or compost, and a second end opposite of the first end and attachable to a free end of the pipe by means of a packing gland, the first end of the smooth rod ~~having~~ being fitted with a tapered air intake strainer;

wherein the program controller having at least one temperature probe and at least one input/output port enabling the program controller to receive PT 100 or PT 1000-type signals for temperature measurement or other signals for measuring other gases present.

10. (currently amended) The gas measurement system as in claim 9, further comprising a main bay in communication with the program controller of the remote bay via a bus.

11. (currently amended) The gas measurement system as in claim 9, wherein the gas intake pump being equipped with a device for regulating the flow of air to the gas measurement probe, the gas measurement probe being a rotameter ~~type~~.

12. (new) The system as in claim 1, wherein the air intake filter is tapered.